

Application No.: 10/528,690  
Amendment under 37 CFR 1.111  
Reply to Office Action dated December 29, 2008  
February 17, 2009

REMARKS

By this amendment, claim 1 has been amended. Currently, claim 1 is pending in the application.

Examiner Nguyen is thanked for the courtesies extended to the undersigned during the telephone conference on January 7, 2009. During the telephone conference, the undersigned reviewed the proposed changes with Examiner Nguyen and made minor suggestions for slight changes especially to the section mentioned in point j in the office action. It was also pointed out that applicants believed that the suggestion by the Examiner that applicants delete the wording "or lower" and "or less" in several claim terms would result in extremely narrow coverage and these changes did not seem to be supported by any explanation. Examiner Nguyen requested the undersigned to please include any alternative suggestions and comments for correcting or clarifying the claims in this regard.

In the office action, Examiner Nguyen suggested several claim changes in points a-k on pages 2-3 of the office action.

By this amendment, claim 1 has been amended as follows:

a) "comprises" (claim 1, line 9) has been changed to  
-- includes -- as suggested by the Examiner.

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b) "wherein said bonding means has a heating mechanism and bonds the metal bonding portion to each other at a temperature of 180°C or lower" (claim 1, lines 14-16) has been changed to -- wherein said bonding means includes a heating mechanism capable of heating the bonding portions to a temperature of 180°C or lower, --.

c) "includes means" (claim 1, line 17) has been changed to -- includes a dispersion means -- as suggested by the Examiner.

d) "includes means" (claim 1, line 20) has been changed to -- includes a roughness means -- as suggested by the Examiner.

e) "or less" was not deleted from claim 1, line 22.

f) "includes means" (claim 1, line 26) has been changed to -- includes an adjusting means -- as suggested by the Examiner.

g) "4  $\mu\text{m}$  or less;" (claim 1, line 29) has been changed to -- 4  $\mu\text{m}$  or less, -- as suggested by the Examiner.

h) "gold;" (claim 1, line 31) has been changed -- gold,-- as suggested by the Examiner.

i) "100 nm or less;" (claim 1, line 33) has been changed to -- 100 nm or less, and --.

j) "a surface hardness of the metal bonding portions is set at 100 or less in Vickers hardness Hv; at least one of the metal bonding portions is formed by a plurality of bumps; and a

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dispersion of bump height is 4  $\mu\text{m}$  or less" (claim 1, lines 34-38) has been changed to: -- the metal bonding portions have 100 or less in Vickers hardness and are in a form of a plurality of bumps, wherein the bumps of each of the metal bonding portions have a dispersion of bump height of 4  $\mu\text{m}$  or less --. Applicants have changed this wording from that suggested by the Examiner because the Examiner's suggestion was confusing in exactly how the wording made grammatical sense.

As mentioned above, the phrases "or lower" and "or less", have not been deleted from claim 1 because applicants' believe that the claims would be unduly restricted without any reason. If the Examiner did not want an alternative phrase in the claims, it is not clear to applicants why some other alternative phrases were not objected to by the Examiner. If the Examiner would prefer that applicants only recite the upper limit of the range without the alternative language, applicants would consider adding language such as "at most" before each of the numerical values in claim 1 and deleting the phrases such as "or less".


It is believed that these amendments and remarks place the application in condition for allowance and an action to that effect is respectfully requested.

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If there are any questions or concerns regarding this amendment or the remarks, the Examiner is requested to telephone the undersigned at the telephone number listed below.

Respectfully submitted,

Date: February 17, 2009

  
Randolph A. Smith  
Reg. No. 32,548

**SMITH PATENT OFFICE**  
1901 Pennsylvania Ave., N.W.,  
Suite 901  
Washington, DC 20006-3433  
Telephone: 202/530-5900  
Facsimile: 202/530-5902  
Suga021709